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| APPLICATION NO.                        | FILING DATE                                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|--|--|----------------------|--------------------------|------------------|
| 10/561,496                             | 06/09/2006                                     | Marcel Jaspars       | ABLE0030US.NP            | 9320             |
| 26259<br>LICATA & TY                   | 26259 7590 10/13/2009<br>LICATA & TYRRELL P.C. |                      | EXAMINER                 |                  |
| 66 E. MAIN STREET<br>MARLTON, NJ 08053 |  |                      | DAVIS, ZINNA NORTHINGTON |                  |
|  |  |                      | ART UNIT                 | PAPER NUMBER     |
|  |  |                      | 1625                     |                  |
|  |  |                      |                          |                  |
|  |  |                      | NOTIFICATION DATE        | DELIVERY MODE    |
|  |  |                      | 10/13/2009               | ELECTRONIC       |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poreilly@licataandtyrrell.com

# Application No. Applicant(s) 10/561,496 JASPARS, MARCEL Office Action Summary Examiner Art Unit Zinna Northington Davis -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status

| Disposition |  |
|-------------|--|

| 1)⊠ Responsive to communication(s) filed on <u>06 July 2009.</u> 2a)□ This action is <b>FINAL</b> .      2b)⊠ This action is non-final.  |      |
|--|------|
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  | s    |
| sposition of Claims  |      |
| 4) Claim(s) <u>28-57</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  |      |
| 5) Claim(s) is/are allowed.  |      |
| 6)⊠ Claim(s) <u>28-57</u> is/are rejected.   |      |
| 7) Claim(s)is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.   |      |
| oplication Papers  |      |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filled onis/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to .See 37 CFR 1.121.  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  | (d). |
| iority under 35 U.S.C. § 119   |      |
| 12]⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b) Some * c) None of:  1.□ Certified copies of the priority documents have been received.  2.□ Certified copies of the priority documents have been received in Application No  3.⊠ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |      |
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|  |      |

PTOL-326 (Rev. 08-06)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 12/19/05

Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (FTO/SE/08)

Attachment(s)

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. \_\_

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

1. Claims 28-57 are pending.

Claims 1-27 have been canceled.

3. Based upon the response filed July 6, 2009, the species election is withdrawn.

The claims are examined as a whole.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 28-57 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the trityl chloride resin as a solid support does not reasonably provide enablement for "all solid supports". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

In *In re Wands*, 8 USPQ2d 1400 (1988), factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. § 112, first paragraph, have been described. They are:

- 1. the nature of the invention,
- the state of the prior art.
- 3. the predictability or lack thereof in the art,
- 4. the amount of direction or guidance present,
- the presence or absence of working examples.
- 6. the breadth of the claims,
- 7. the quantity of experimentation needed, and
- 8 the level of the skill in the art

### The Nature of the Invention

The nature of the invention is drawn to claims for preparing 1,3-dialkyl pyridinium

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compounds wherein a solid support is used. See claim 28.

#### The State of the Prior Art

The state of the prior art teaches that solid supports, solid support substrates and methods of using solid support substrates are suitable for use in the production of very large and complex libraries of pure macrocyclic molecules from simple amino acid starting molecules. The macrocycles may have useful pharmaceutical applications.

See WO03/040094 (Walsh et al, Reference BA, cited by the Applicants).

### The predictability or lack thereof in the art

The instant claimed invention is highly unpredictable as discussed below:

It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In re Fisher, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute.

The instantly claimed invention is highly unpredictable since one skilled in the art would recognize that in regards to a process for preparing chemical compounds the clam solid support is not defined.

At page 43-46, Walsh et al. teaches many solid support substrates which are useful in library formation. However, each solid support bound substrate reacts according to the combination of groups.

#### The amount of direction or guidance present

The direction present in the instant specification is that the compounds of claim

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28 can be prepared by reacting a solid support. The specification is silent and fails to provide guidance as to whether all solid support compounds can form the claimed linear di-substituted pyridinium compounds.

At page 9, lines 4-11 of the specification, the preferred solid support materials are listed.

## The presence or absence of working examples

The only presence of a working example is the Scheme 3 on pages 18-19.

There are not other working examples for any solid support material listed in the specification. The breadth of the claims is that the compound of claim 28 can made with the use of any solid support.

## The quantity of experimentation needed

The quantity of experimentation needed is undue experimentation. One of skill in the art would need to determine what solid state support would be reacted and how that target substrate would react.

#### The level of the skill in the art

The level of skill in the art is high. However, due to the unpredictability in the pharmaceutical art, it is noted that each library of solid support bound substrate may react differently. Additionally, applicants have not provided any biological data for the synthesized compounds. Therefore, it is deemed that further research of an unpredictable nature would be necessary to make or use the invention as claimed.

Therefore, in view of the Wands factors and In re Fisher (CCPA 1970) discussed above, to practice the claimed invention herein, a person of skill in the art would have to Application/Control Number: 10/561,496 Page 5

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engage in undue experimentation to test which diseases can be treated by the compound encompassed in the instant claims, with no assurance of success.

- The Information Disclosure Statement filed December 19, 2005 has been considered
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zinna Northington Davis whose telephone number is 571-272-0682.
- The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zinna Northington Davis/ Zinna Northington Davis Primary Examiner Art Unit 1625